

What is claimed is:

1. A variable optical attenuator comprising an Electrically Switchable Bragg Grating device positioned to accept an incident optical beam and divide said incident optical beam into a transmitted undiffracted component and a diffracted component, and a polarization-converting reflector positioned to reflect said undiffracted component back through said Electrically Switchable Bragg Grating device.
2. The device of claim 1 wherein said polarization converting reflector is comprised of a one-quarter-wave retardation plate and a mirror.
3. The device of claim 1 wherein said polarization converting reflector is comprised of a 45-degree Faraday rotation plate and a mirror.